

FORM PTO-1390  
(REV 12-2001)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTORNEY DOCKET NO.  
60562.00007

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

DATE: June 10, 2005

US APPLICATION NO. 107538290  
(IS KNOWN, SEE 37 C.F.R. 1.5)

INTERNATIONAL APPLICATION NO.  
PCT/JP2003/015999

INTERNATIONAL FILING DATE  
12 December 2003

PRIORITY DATE CLAIMED  
13 December 2002

TITLE OF INVENTION: WATER ELECTROLYSIS METHOD AND DEVICE FOR DETERMINATION OF HYDROGEN AND OXYGEN STABLE ISOTOPIC COMPOSITION

APPLICANT(S) FOR DO/EO/US: Naohiro YOSHIDA; Osamu ABE; Ryu UEMURA; Hiroshi WATANABE

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.  
(THE BASIC FILING FEE IS ATTACHED)
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures [35 U.S.C. 371(f)] at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed [35 U.S.C. 371(c)(2)]
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed [35 U.S.C. 371(c)(2)].
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 [35 U.S.C. 371(c)(3)]
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 [35 U.S.C. 371(c)(3)].
9. ☒ An oath or declaration of the inventor(s) [35 U.S.C. 371(c)(4)].
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 [35 U.S.C. 371(c)(5)].

Items 11 - 20 below concern other document(s) or information included:

11. ☒ Application Data Sheet.
12. ☒ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98, along with form PTO-1449 and 5 References.
13. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
14. ☒ A FIRST preliminary amendment.  
☐ A SECOND or SUBSEQUENT preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☒ Other items or information: CHECK NO. 12991; Formal Drawings (Figs. 1-7; 7 sheets); PCT/ISA/210; Letter to WIPO dated 5/30/05; PCT/ISA/220; PCT/IB/308; PCT/ISA/202; PCT/ISA/224; PCT/IB/304; PCT/IB/301; Correction; PCT/RO/106; PCT/RO/105; PCT Request

U.S. APPLN. NO. (IF KNOWN) <b>10/538290</b> SEE 37 C.F.R. 1.50		INTERNATIONAL APPLICATION NO. PCT/JP2003/015999		ATTORNEY DOCKET NO. 60562.00007 DATE: June 10, 2005	
20. <input checked="" type="checkbox"/> The following fees are submitted: Basic National Stage Fee .....\$300.00 National Stage Search Fee.....\$500.00 National Stage Examination Fee.....\$200.00				CALCULATIONS   PTO USE ONLY <hr/>	
ENTER APPROPRIATE BASIC FEE AMOUNT =				\$ 1,000.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date [37 C.F.R. 1.492(e)].					
Claims	Number Filed	Number Extra	Rate		
Total Claims	7 - 20 =	0	X \$ 50.00		
Independent Claims	3 - 3 =	0	X \$ 200.00		
Multiple dependent claim(s) (if applicable)			+ \$360.00		
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250.00 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		X \$250.00		
TOTAL OF ABOVE CALCULATIONS =				\$ 1,000.00	
Reduction by one-half for filing by small entity, if applicable. Applicant claims small entity status. See 37 CFR 1.27.					
SUBTOTAL =				\$ 1,000.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date [37 C.F.R. 1.492(f)]. +					
TOTAL NATIONAL FEE =				\$ 1,000.00	
Fee for recording the enclosed assignment [37 C.F.R. 1.21(h)]. The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property +				\$ 40.00	
TOTAL FEES ENCLOSED =				\$ 1,040.00	
				Amount to be refunded	\$
				Charged	\$

U.S. APPLN. NO. (IF KNOWN, SEE 37 C.F.R. 1.50)	INTERNATIONAL APPLICATION NO. PCT/JP2003/015999	ATTORNEY DOCKET NO. 60562.00007 DATE: June 10, 2005
---	--	--

a. ☒ A check in the amount of \$1,040.00 to cover the above fees is enclosed.

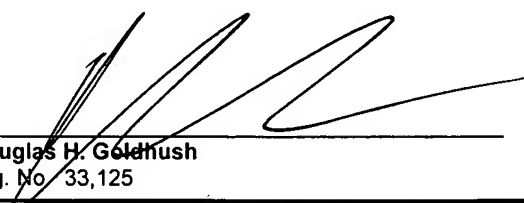
b. ☐ Please charge Counsel's Deposit Account No. 50-2222 in the amount of \$\_\_\_\_\_ to cover the above fee.  
• A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Counsel's Deposit Account No. 50-2222.

NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive [37 C.F.R. 1.137(a) or (b)] must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

**Customer Number 32294**  
**SQUIRE, SANDERS & DEMPSEY LLP**  
**8000 Towers Crescent Drive**  
**14<sup>th</sup> Floor**  
**Tysons Corner, Virginia 22182-2700**  
**Telephone: 703-720-7800**  
**Fax: 703-720-7802**

  
\_\_\_\_\_  
**Douglas H. Goldhush**  
Reg. No. 33,125